

SECRET

ATIC, AFCIN-4E1, 30 Jan 58, Subj: (U) Proposed MTI Circuitry

RCERD

1st Ind **MAR 31 1958**

HEADQUARTERS ROME AIR DEVELOPMENT CENTER, United States Air Force,
ATTN: RCERD, Griffiss Air Force Base, New York

TO: Commander, Air Technical Intelligence Center, United States Air
Force, ATTN: AFCIN-4E1, Wright-Patterson Air Force Base, Ohio

25X1
1. Reference is made to the inclosed memo entitled "Moving
Target Indicator - Proposed by [redacted]"

2. The technique is theoretically feasible in that the basic
velocity information is available. Its applicability, however, is
limited by the system parameters involved such as the transmitted
wavelength, the velocities of interest, and the pulse width. If
the effective period of the Doppler frequencies of interest is very
large compared to the transmitted pulse width, it is doubtful whether
an adequate signal-to-noise ratio will be available for reliable
detection. Similar techniques are applicable with suitable parameters
for detection of high speed ballistic missiles. (SECRET)

3. No information is available regarding patentability of the
proposed system.

4. It is suggested that WADC be contacted regarding applicability
of the proposed technique for airborne radar.

5. This document is classified SECRET because it discusses the
contents of a technique classified SECRET.

FOR THE COMMANDER:

1 Incl
n/c

James T. Pope
JAMES T. POPE
CHIEF, AIR TECHNICAL INTELLIGENCE
DIVISION, AIR FORCE & GUIDANCE

USAF review(s) completed.

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